

BOROUGH



OF KENDAL.

ANNUAL REPORT

OF THE

MEDICAL-OFFICER-OF-HEALTH,

FOR THE

YEAR ENDING DECEMBER 31st, 1906.

ROBERT MUSGRAVE CRAVEN, D.P.H., CAMB.,

MEDICAL-OFFICER-OF-HEALTH FOR THE WESTMORLAND COMBINED
COUNTY DISTRICTS.

KENDAL :

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—
1907.



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BOROUGH OF KENDAL.—1906.

Table of Death-rates from All Causes, from Phthisis and Infectious Diseases, since the passing of the Registration Act, 1837.
This Tabulation was begun by the late Dr. David Page.

Year	Estimated Population June 30th	Deaths from			Annual Rate of Mortality per 1000 from				Percentage to total Deaths from		Deaths from								Meteorology		
		All Causes	Phthisis (Consumption)	Seven principal Zymotic Diseases	All Causes	Corrected for Age and Sex distribution	Phthisis	Seven principal Zymotic Diseases	Phthisis	Seven principal Zymotic Diseases	Smallpox	Measles	Scarlet Fever	Diphtheria and Membranous Croup	Whooping Cough	Typhus Fever	Typhoid Fever or Enteric Fever	Other Fevers	Diarrhea and Dysentery	Mean Temperature of the Air	Rainfall in Inches
1838	11800	339	68	54	28.7	...	5.8	4.0	20.0	15.9	35	..	97	..	7	..	..	11	1	44.81	45.739
1839	11800	414	51	149	35.1	...	4.3	12.6	12.3	36.0	19	..	16	..	8	..	..	20	2	46.09	57.965
1840	11800	343	56	83	29.1	...	4.7	7.0	16.3	24.2	7	34	16	..	11	13	..	11	2	46.03	48.227
1838-40	365.3	58.3	58.3	95.3	31	...	4.9	7.9	16.2	25.4	20.3	11.3	37.6	..	5	5.3	..	14	1.7	45.643	50.644
1841	11800	264	48	22	22.4	...	4.1	1.9	18.1	8.3	..	..	4	..	14	2	..	1	1	46.17	53.854
1842	11800	268	47	34	22.8	...	4.0	2.9	17.5	12.7	..	..	5	..	..	..	..	12	..	47.01	48.072
1843	11800	286	64	26	24.2	...	5.4	2.2	22.0	9	..	..	..	..	..	12	..	4	5	46.86	56.307
1844	11800	309	37	35	26.2	...	3.0	2.9	12.0	11.3	..	..	22	..	..	7	..	2	4	45.58	43.012
1845	11800	336	52	53	28.5	...	4.4	4.5	15.5	15.7	37	..	3	..	..	6	..	4	3	45.47	53.346
1841-45	292.6	49.6	34	34	24.8	...	4.2	2.9	17.0	11.4	7.4	5.4	2.4	..	2.8	8.8	..	4.6	2.6	46.218	50.918
1846	11800	427	56	99	36.2	...	4.7	8.4	13.1	23.2	7	3	23	..	1	40	..	14	11	48.44	52.365
1847	11800	370	57	73	31.4	...	4.8	6.2	15.4	19.7	..	..	47	..	..	16	..	5	5	46.67	52.197
1848	11800	340	53	26	28.8	...	4.5	2.4	15.5	8.2	..	..	9	1	..	10	..	2	4	46.32	56.314
1849	11800	276	33	30	23.4	...	2.8	2.5	11.9	10.8	..	..	2	..	..	13	..	8	7	46.62	48.038
1850	11800	239	25	16	20.2	...	2.1	1.3	10.4	6.7	..	..	..	..	5	6	..	3	2	46.64	49.576
1816-50	330.4	44.8	34.6	44.2	28	...	3.8	4.2	13.2	13.7	1.4	2.8	14.2	..	1.6	17	..	6.4	5.8	46.938	51.704
1851	11800	310	42	57	26.2	...	3.5	4.8	13.5	18.3	..	..	6	35	..	5	..	4	7	46.35	47.561
1852	11900	283	27	62	23.8	...	2.2	5.2	9.5	21.9	1	..	44	..	..	9	..	2	6	47.55	65.354
1853	11500	250	38	30	21	...	3.2	2.5	15.2	12.0	9	..	5	..	12	1	..	3	5	45.56	39.455
1854	12150	243	37	20	20	...	3.1	1.7	11.1	8.2	9	..	1	..	..	1	..	2	3	46.68	46.133
1855	12000	259	29	52	21.6	...	2.4	4.3	11.2	20.1	1	34	3	..	..	11	..	1	2	45.98	34.54
1851-55	269	34.6	34.6	44.2	22.5	...	2.9	3.7	12.1	16.1	2.4	8	18	..	2.6	6.2	..	2.4	4.6	46.42	46.608
1856	12000	235	36	13	19.6	...	3.0	1.0	15.3	18.3	..	..	7	..	..	4	..	1	..	48.054	39.482
1857	12000	230	33	15	19.2	...	2.7	1.2	14.3	6.5	..	..	2	2	..	6	..	2	2	47.82	60.697
1858	12050	259	34	37	21.5	...	2.8	3.1	13.1	14.2	5	..	9	..	9	10	..	2	4	47.70	54.307
1859	12050	298	41	57	24.7	...	3.4	4.7	13.7	15.1	3	32	1	..	1	7	..	5	5	48.357	54.919
1860	12050	234	32	6	19.4	...	2.6	5	13.6	2.5	..	..	..	..	..	11	..	..	13	46.865	47.371
1856-60	251.2	35.2	35.2	25.6	20.8	...	2.9	2.1	14	9.5	1.6	7.4	2	..	4.2	6.6	1	1.8	1	48.079	44.701
1861	12070	239	22	17	19.8	...	1.8	1.4	9.2	7.1	..	..	6	..	2	1	..	2	4	47.82	60.697
1862	12200	325	35	63	26.6	...	2.9	5.2	10.8	19.4	..	..	46	..	2	3	..	2	2	47.70	54.307
1863	12350	257	30	23	20.8	...	2.3	1.9	11.7	8.9	..	..	3	..	6	4	..	2	2	48.357	54.919
1864	12500	255	40	10	20.4	...	3.2	8	15.7	3.9	1	..	1	..	1	7	..	5	5	46.865	47.371
1865	12500	307	36	33	24.3	...	2.8	2.6	11.7	10.7	..	..	..	..	..	1	..	..	13	46.865	47.371
1861-65	276.6	32.6	32.6	29.2	22.4	...	2.6	2.4	11.8	10	2	3.2	11.2	..	3.4	3	8	2	5.2	47.807	52.052
1866	12900	269	38	28	21	...	3.0	2.2	14.1	10.4	..	..	4	..	8	5	3	3	5	48.125	60.393
1867	12900	322	29	74	25	...	2.2	5.7	9	23	..	..	18	47	..	1	..	1	2	47.82	60.697
1868	13100	261	36	34	19.9	...	2.9	2.6	13.8	13	..	..	3	..	6	4	..	2	2	47.70	54.307
1869	13200	277	37	11	20.9	...	2.8	8	13.3	4	..	..	4	15	..	1	..	..	11	49.077	52.745
1870	13400	337	49	47	25.2	...	3.7	3.5	14.5	13.9	..	..	20	3	..	12	..	2	10	48.32	43.09
1866-70	293.2	37.8	37.8	38.8	22.4	...	2.9	2.9	12.9	12.8	..	..	9.4	13.2	..	4	1.8	1.8	1.4	48.061	51.806
1871	13453	263	37	13	19.5	...	2.7	9	14.1	4.9	..	..	..	..	5	3	..	2	4	47.81	50.245
1872	13477	260	24	27	19.2	...	1.7	2.0	9.2	10.4	..	..	1	..	12	3	..	2	2	49.81	69.178
1873	13502	263	29	13	19.4	...	2.1	9	10.6	4.9	..	..	..	..	3	1	..	7	3	48.322	49.365
1874	13527	302	22	42	22.3	...	1.6	3.1	7.3	13.9	..	..	17	..	6	6	..	5	..	48.322	49.365
1875	13551	272	32	15	20.0	...	2.3	1.1	11.7	5.5	..	..	..	..	1	2	..	..	4	48.615	46.22
1871-75	13577	272	32	15	20.0	...	2.3	1.6	10.5	7.9	4	3.6	1.4	..	6.6	..	3.4	1.2	3.4	48.513	54.022
1876	13577	259	17	14	19.0	...	1.2	1.0	6.5	5.4	4	..	2	..	2	..	..	..	6	48.43	51.885
1877	13602	225	31	22	16.5	...	2.2	1.6	13.7	9.7	..	..	3	..	..	..	2	..	3	47.784	65.775
1878	13627	305	32	19	22.3	...	2.3	1.4	10.4	6.3	..	..	..	..	7	..	..	..	7	47.784	65.775
1879	13652	253	41	5	18.5	...	3.0	3	16.2	2	..	..	6	..	6	..	..	..	2	44.41	45.18
1880	13677	333	44	91	24.3	...	3.2	6.6	10.2	27.3	..	..	20	56	..	1	..	7	..	48.188	45.06
1876-80	275	33	33	30.2	20.1	...	2.3	2.1	11.4	10.1	8	7	12.4	..	3	..	2.8	..	4	47.33	49.931
1881	13702	255	29	15	18.6	...	2.1	1.0	11.7	5.8	1	1	6	..	3	..	2	..	1	45.524	59.77
1882	13779	265	34	17	19.2	...	2.5	1.2	12.8	6.4	..	..	4	5	..	3	..	3	1	47.448	59.82
1883	13848	253	42	16	18.2	...	3.0	1.1	16.6	6.3	..	..	9	..	2	..	19	..	13	47.187	51.51
1884	14356	272	43	42	19.6	...	3.0	3.0	15.8	15.4	..	..	2	..	..	1	..	..	..	48.238	44.47
1885	13996	256	36	17	18.2	...	2.5	1.2	14	6.6	..	..	2	..	..				

NOTES TO ACCOMPANY THE BOROUGH MORTALITY TABLE.

*From all Causes, Phthisis, and Infectious Diseases, since the passing of the
Registration Act, 1837.*

SMALL-POX.

1.—*Epidemic* in 1838-39. The death of a child aged 5 years occurred on the 19th January, in Stricklandgate; but the outbreak would appear to have commenced in October, when the death of an infant, six months old, was recorded on the 7th of that month in Allhallows Lane, and to have continued until March, 1839, the last death being on March 10th of a man aged 40, residing in Branthwaite Brow. Of the 54 deaths, 16 were under 1 year, 18 between 1 and 5 years, 17 between 5 and 20 years, 3 above 20 years.

2.—*Epidemic* in 1845-46. A child aged 5 years died on February 3rd in Stricklandgate, and two other deaths occurred in March, but the chief fatality occurred in the months of November and December, and the last death on the 3rd of June, 1846. Of the 44 deaths, 8 were under 1 year, 19 between 1 and 5 years, 7 between 5 and 20 years, 10 of 20 years and upwards.

3.—Small outbreak in 1888, commencing with importation of the disease from Lancashire and Yorkshire, where it was epidemic.

4.—Small outbreaks in 1903 and 1905.

MEASLES.

Epidemics in 1840, 1844, 1855, 1859, 1867, 1870, 1874, 1877, 1880, 1884, 1888, 1889, 1892, 1895, 1898, and 1903.

SCARLET-FEVER.

1.—*Epidemic* in 1839-40. It commenced in May, 1839, reached its height in the last week of October and the beginning of November, and subsided in February, 1840. Of the 113 deaths, 87 were below 5 years, 23 between 5 and 10 years, 3 between 10 and 20 years.

2.—*Epidemics* in 1846-47, 1851-52, 1862-63, 1867-68, and 1880. (The building of an infectious diseases hospital for the Borough was determined on after the epidemic of 1880, and the Sanatorium was first used in September, 1882, when scarlet-fever patients were admitted.

3.—An outbreak in 1893, but of a mild type. Mortality, four.

4.—An outbreak in 1894, again of a mild type. Commenced in the first week in July, attained its height in the week ending 13th October (22 cases notified in that week), and gradually diminished, seven cases only being notified in the last fortnight of the year. Mortality, five.

5.—An outbreak in 1900. 92 known cases, of which 88 were isolated in the Sanatorium. Mortality, two.

6.—An outbreak in 1901, which commenced in the middle of November, continued through 1902 and into 1903; three cases only were notified during the last four-and-a-half months of the year 1903. Mortality, twelve in 1902 and 1903.

7.—An outbreak in 1904, very similar to that in 1894 but more extensive. There were a number of cases in the first five months of the year, but in the third week in June the outbreak became severe; attained its highest point in the second week in October, and by the end of November had diminished to small proportions. Mortality, four.

DIPHTHERIA.

The absence of any deaths certified from this disease before the year 1861 may be due to such deaths having been included under the common appellation of Croup.

1.—*Epidemic* in first two months of 1888, during and after a dense fog which hung over the town from January 8th to 20th.

WHOOPING-COUGH.

High mortalities in the years 1841, 1853, 1858-59, 1862-63, 1870, 1872, 1885, and 1903. The prevalence of this disease in 1885 was during the last eight months of the year. The 11 deaths were all of children under five years of age, as also were the three deaths in 1886, and two deaths in 1887.

FEVER.

1.—This term includes all forms of continued fever. The death-rate was almost annually heavy down to 1860; since that date there has been a very perceptible decline (Waterworks Company in 1849; Main Sewage Works completed by the end of 1873). As typhoid or enteric fever was not distinguished from typhus-fever until 1840-41, and not generally in England before 1851, most of the deaths appearing under the column of typhus-fever may be presumed to have been typhoid or enteric-fever. The first return of death from this latter disease was in 1856, and no return of typhus-fever has been made since 1868. The death-rate under typhus-fever was annually constant from 1839 to 1863; and from 1868, since when no such return has been made, the mortality from enteric-fever has been continuous, except in the years 1877, 1879, 1885, 1892, 1900, 1901, 1902, 1905, and 1906, that is five out of seven years in the 20th century have been free from mortality.

The *constant prevalence* of fever was greatly accentuated in the years 1839-40, 1842-43, 1846-47, 1849, and 1858. The absence of mortality under records "other fevers" since 1873, tends to the belief that such returns formerly should have been made as of enteric-fever. *The decrease of mortality from fever* (including typhus, enteric, and others) may be gathered from the following table, which shows the number of deaths from fever in each of fourteen periods of five years :—

Period of years	...	1839-40	1841-45	1846-50	1851-55	1856-60
Mortality	...	58	67	117	43	47
Period of years	...	1861-65	1866-70	1871-75	1876-80	1881-85
Mortality	...	29	25	23	14	29
Period of years	...	1886-90	1891-95	1896-1900	1901-05	1906
Mortality	...	13	10	5	3	0

2.—From January to April, 1884, inclusive, there was a serious outbreak of enteric-fever, affecting solely the north end of the town, due apparently to a curious combination of meteorological circumstances, with an inadequate ventilation of the main sewer in that district, and individual instances of faulty house-drain connections.

3.—A considerable outbreak in 1893, mainly between the middle of August and the middle of October, following a long period of exceptionally dry weather, during which the town was supplied by the Water Company with water from the river Mint.

DIARRHŒA.

An almost constant small mortality.

Exceptional. 1.—In 1846, during fatal epidemic of so-called "typhus fever."

2.—In 1865, 1868, 1870, and in 1884, during exceptional heat in July and August. In 1884 the exceptional heat continued into September, and was accompanied by mortality.

3.—No diarrhœa mortality in the year 1888, the first time in twenty-eight consecutive years.

4.—Diarrhœa was prevalent in August and September, 1893, hot weather with showers following a very long period of drought. Water supply of the town was temporarily derived from the river Mint.

CHOLERA.

No registered return. The last epidemic in this country was during 1831-32, and therefore before the passing of the Registration Act.

BOROUGH OF KENDAL.

*Annual Report of the Medical-Officer-of-Health for the
Year ending December 31st, 1906.*

Area	...	...	...	...	2,622 Acres.
Population (census 1901)			...	...	14,183
Inhabited houses	...		...	...	3,096
Average population per house	...		...	...	4·5

ESTIMATE OF POPULATION IN 1906.

	Under 5 yrs.	Under 15 yrs.	Under 25 yrs.	Under 65 yrs.	Over 65 yrs.	All Ages.
Population estimated on June 30—						
Males	769	1511	1244	2703	320	6547
Females	746	1494	1566	3345	451	7602
Recorded death-rates per 1000 esti- mated to be living in age-period ...	33·0	1·66	2·4	12·07	85·6	14·06

BIRTHS	...	...	{ Males 158 }	Persons 305
			{ Females 147 }	
Annual Rate of Births per 1000 of the population	...	21.55		
DEATHS	...	...	...	...
Annual Rate of Mortality per 1000	...	...	...	14.06
But corrected for age and sex distribution, 13.69				
Comparative Mortality Figure (England and Wales, 1000				} 900
Excess of Registered Births over Deaths, 106				

GENERAL MORTALITY IN 1906.

The total number of deaths registered in the year 1906 was 199. This is after deducting the deaths of non-residents who died in Public Institutions within the Borough, and adding the deaths of those residents who died in Public Institutions in other places. Estimating the population at 14,149, this is equal to a death-rate of 14·06 per 1000 of the population, or, corrected for age and sex distribution, 13·69 per 1000.

ZYMOTIC MORTALITY.

The number of deaths from zymotic diseases, excluding diarrhoea, was 6, and this is equal to a death-rate of ·42 per 1000 of the population.

MORTALITY FROM PHTHISIS.

The number of deaths due to phthisis was 15, or equal to a rate of 1·06 per 1000.

ANALYSIS OF THE DEATH-RATE.

INFANT MORTALITY.

Of the total number of deaths, 35, or 17·6 per cent. were under one year.

The deaths of children under one year were at the rate of 106 per 1000 births.

DEATHS OF INFANTS UNDER ONE YEAR, PER 1000 BIRTHS.

1891-95	1896-1900	1901-05	1901	1902	1903	1904	1905	1906
<u>137</u>	<u>117</u>	<u>115</u>	<u>138</u>	<u>102</u>	<u>123</u>	<u>97</u>	<u>117</u>	<u>106</u>

CHILD MORTALITY.

Fifty deaths, or 25·1 per cent. of the total deaths, were of children under five years of age, being at the rate of 3·5 per 1000 of the population.

DEATH-RATE UNDER FIVE YEARS PER 1000 OF THE POPULATION.

1891-95	1896-1900	1901-05	1903	1904	1905	1906
<u>5·8</u>	<u>4·4</u>	<u>3·9</u>	<u>4·8</u>	<u>3·6</u>	<u>3·3</u>	<u>3·5</u>

DEATH-RATE UNDER FIVE YEARS PER 1000 ESTIMATED TO BE LIVING
AT THAT AGE PERIOD.

1891-95	1896-1900	1901-05	1903	1904	1905	1906
<u>47·1</u>	<u>40·2</u>	<u>37·1</u>	<u>44·74</u>	<u>33·5</u>	<u>31·0</u>	<u>33·0</u>

The following table gives the number of deaths of children under one year and under five years respectively :—

Year.	No. of deaths under one year.	No. of deaths between one and five years.
1881-85	... mean 57·4	... 31·2
1886-90	... mean 56·8	... 27
1891-95	... mean 58·2	... 25·6
1896-1900	... mean 43·4	... 20·4
1901-05	... mean 38·4	... 18
1902	... 34	... 15
1903	... 41	... 27
1904	... 36	... 15
1905	... 36	.. 11
1906	... 35	.. 15

ADULT MORTALITY.

The number of deaths between five and 65 years of age was 85, being at the rate of 6·0 per 1000 of the total population, 7·16 per 1000 estimated to be living at that age-period, and constituting 42·7 per cent. of the deaths at all ages.

Death-rate per 1000 of the population estimated to be living at that age-period :—

1893-95	1896-1900	1901-05	1903	1904	1905	1906
<hr/> 7·6	<hr/> 6·6	<hr/> 6·9	<hr/> 8·0	<hr/> 5·9	<hr/> 6·8	<hr/> 7·16

OLD-AGE MORTALITY.

The number of deaths of persons of 65 years of age and upwards were 64, being at the rate of 4·5 per 1000 of the total population, 83 per 1000 estimated to be living at that age period, and constituting 32 per cent. of the deaths at all ages.

Death-rate of 1000 of the population estimated to be living at that age-period :—

1893-95	1896-1900	1901-05	1903	1904	1905	1906
<hr/> 88·5	<hr/> 89·5	<hr/> 96·3	<hr/> 92·1	<hr/> 92·1	<hr/> 111	<hr/> 83

The following table gives the Birth Rates, the Recorded Annual Death Rates per 1000 from All Causes, and from the several Epidemic Diseases during the year 1906.

	ANNUAL RATES PER 1000 LIVING.										
	Births. (1)	Deaths. (2)	Principal Epidemic Diseases. (3)	Small- pox. (4)	Measles. (5)	Scarlet Fever. (6)	Diph- theria. (7)	Whooping Cough. (8)	Fever. (9)	Diarrhoea. (10)	Deaths under one year per 1000 Births. (11)
England and Wales ...	27·0	15·4	1·73	0·00	0·27	0·10	0·17	0·23	0·09	0·87	133
76 Great Towns ...	27·8	15·9	2·24	0·00	0·40	0·12	0·19	0·28	0·09	1·16	145
142 Smaller Towns ...	26·5	14·5	1·71	..	0·22	0·09	0·17	0·20	0·09	0·94	138
Rural England and Wales	26·3	15·1	1·18	0·00	0·14	0·08	0·16	0·19	0·09	0·52	116
County of Westmorland	20·88	12·93	0·26	0·00	0·00	0·04	0·04	0·17	0·00	0·20	88
Borough of Kendal ...	21·55	14·06	0·42	0·00	0·00	0·00	0·00	0·42	0·00	0·56	106
Rural District of S. Westmorland	17·78	10·47	0·05	0·00	0·00	0·00	0·05	0·00	0·00	0·05	52

METEOROLOGY, with special Mortalities in parallel column. Observer, R. J. NELSON, Esq., Ivy Garth, Kendal.

1906.	BAROMETER.			THERMOMETER.					RAINFALL.			DEATHS FROM								
	Highest Reading.	Day of Month.	Lowest Reading.	Day of Month.	Mean Reading.	Highest Reading.	Day of Month.	Lowest Reading.	Day of Month.	Mean Reading.	No. of days on which 32 or less has been registered.	Prevailing Wind.	Total.	Maximum fall registered in 24 hourly period by 5 inch gauge.	Day of Month.	No. of days on which 1 or in. or more fell.	All Causes.	Phthisis.	Zymotic Disease.	Nature of such Zymotic Disease.
January ..	30'4	23	29'1	8	29'6	53	30	32	1	40½	4	SW	7'48	1'1	28	25	18	..	1	Whooping Cough.
February ..	30'2	7	28'6	11	29'9	45	26	20	12	35	23	SW	3'79	0'72	10	13	22	2	1	
March ..	30'2	20	29'1	11	29'1	60	29	25	14	41	18	NE	3'63	0'67	11	16	22	1	1	
April ..	30'5	9	29'1	26	29'1	69	13	25	3	42½	19	N	1'90	0'42	27	14	9	..	1	
May ..	29'95	8	29'4	16	29'4	75	13	30	2	51½	3	SW	8'15	1'10	19	26	16	1	1	
June ..	30'2	5	29'3	1	29'3	82	5	35	30	59½	..	SW	2'59	0'93	26	10	19	1	2	
July ..	30'15	9	29'5	19	29'8	84	7	40	11	60	..	NW	2'69	0'50	18	15	16	2	..	
August ..	30'3	28	29'3	25	29'7	80	7	39	10	63	..	SW	6'44	1'13	12	17	16	4	..	
September ..	30'4	20	29'1	15	29'6	82	1	32	27	55	4	SW	1'36	0'64	13	8	18	3	..	
October ..	29'9	7	29'3	28	29'6	66	11	25	14	48	5	SW	8'20	1'13	27	27	13	..	..
November ..	30'3	23	29'0	19	29'7	56	23	23	14	43	7	NW	5'56	0'67	17	21	13	..	..
December ..	30'4	20	29'1	26	29'7	54	3	18	23	36	20	N	4'33	0'55	5	21	24	1	..	
Totals & Means	30'5	..	28'6	..	29'5	84	..	18	..	47'93	100	..	54'11	1'13	..	213	206	15	6	

BIRTH-RATE.

The total number of births registered was 305 against 307 in the previous year, and the birth-rate was therefore 21·55 per 1000 of the estimated population.

The births and birth-rates have been as follows :—

Year.	Births.		Birth-rates.
1881-85	...	mean 455	32·8
1886-90	...	mean 422	29·6
1891-95	...	mean 420	29·2
1896-1900	...	mean 372	26·04
1901-05	...	mean 324	22·8
1902	...	331	23·3
1903	...	332	23·4
1904	...	371	26·2
1905	...	307	21·7
1906	...	305	21·55

AGE AND SEX DISTRIBUTION.

As in previous annual reports, I must again turn to the discussion of the age and sex distribution, for above all other questions, it has become the ruling factor in our health statistics. It needs no professional statistician to tell the people of Kendal that there is a very great change going on in what I may call the “make-up” of the population. What the present population is we do not know, but we do know that for some time back emigration from Kendal to America or other places has been brisk. We know that at the last census, in 1901, there were 770 persons over 65 years of age, out of a total of 14,183; we know that these are not the people who have emigrated to other lands, but it is the young and active wage-earners who are gone, those who, had they remained, would have been the fathers and mothers of a generation to come, and the stay and support of the old people, when age and infirmity reduced, or totally abated, their self-supporting power. Our population is materially altering by reason of the great decrease in the birth-rate, year after year. Where, 10 or 15 years ago, there were three births there are now two; fewer children are growing into manhood or womanhood; fewer places are required in the schools. The emigration of the young wage-earning, self-sustaining men and women (the potential parents of the coming generation) means that the remaining population contains an undue proportion of the aged and feeble, whose

powers are unequal to maintain the competition of the old town, not only against the vigorous people of the West Riding of Yorkshire but against the world beyond the seas, whose energies are being constantly recruited by the young lives from our own shores. With only 100 men to 132 women between the ages of 20 and 40 years in Kendal in 1901, and possibly only 100 to 140 or 150 now (whilst there are 100 men to 106 women in the whole of England and Wales), it is no cause whatever for surprise that the birth-rate of Kendal is such that there are, as I said before, only two births where there used to be three. The fact that it is so, goes far to prove that the wicked malpractices of so called civilization are not operative here, or the birth-rate would, without any doubt, have been still lower than it is. When we have regard to the altered proportions of the sexes between 20 and 40 years of age, and we know that there is nothing exceptional indicated by the illegitimate birth-rate (compared with years gone by), we have a certain degree of satisfaction.

GENERAL MORTALITY.

The bare fact that the death-rate of the past year was 14·06 per 1000 of the total population, conveys little meaning, but reference to the page which follows the title page of this report shows that the mortality of the past year, 199 deaths, is lower than in any year, with the exception of 1899 and 1904. I should like to infer from that fact that the health of the district is better, as indicated by a decreased mortality; but I am not sure that I am justified in so doing. It is six years since the last census, and I am perfectly sure that the make-up of the population is very different to what it was then. With a lower birth-rate we have fewer babies "at risk" between birth and one year. At that age period 106 per 1000 is the death-rate in Kendal (52 per 1000 in the surrounding Rural District of South Westmorland), whilst between five years and sixty-five years (and that age-period included 11,900 out of 14,200 people in Kendal in 1901), the death-rate is 7·16 per 1000—see pages 8 and 10.

In 1901 there were 771 people over 65 years of age, and their death-rate is usually about 92 per 1000 in Kendal—see page 10. If there are *still* 771 over 65 years of age, but the population has decreased from 14,183, by the decrease in number of persons between 5 and 65 years of age (whose death-rate is 7·16 per 1000), then the rate of mortality of the town ought to have *gone higher*. Our intercensal periods are far too long. If we only take the census for the gratification of curiosity, or to ascertain that

the Registrar has not too many or too few persons in his district, or that the Vicar of the parish has not more people in it than he can conveniently baptize, marry, or inter when dead, or visit when alive, census once in ten years might be sufficient ; but in these rapid transitions of trade and social conditions, brought about by the construction or working of railways and the like, or by inventions or the competition of other countries, then it is essential that the population and the age and sex distribution and occupations of the people of a district shall be ascertained, in order to the adoption of and carrying on of such measures as may be essential to secure the health of the people—"Salus populi suprema lex."

In the carrying out of this supreme law, the efforts of Health Officers and Education Officers should be closely allied. In the schools there is abundant room for practical teaching of Domestic Science to girls, which would enable them to practice true economy, prepare nourishing food, and maintain hygienic conditions in the home, which is, after all, the great field of sanitary reform. The subject deserves also the attention of the girls of what are known as the higher classes, for not only will it enable them to become independent of the discomforts often caused by inefficient service, but also such knowledge is a means of doing good work in their day and generation, by imparting to their less favoured neighbours better methods of maintaining household comfort, and, above all, the proper feeding of infants, so helping to check the terrible mortality amongst young children which causes so much anxiety to all lovers of their country.

Educated women as Health Visitors have already made their mark in this direction, and I trust their sphere of activity may be greatly enlarged.

The maintaining of happy and healthy homes is also one of the most powerful weapons in the war against intemperance. Simple teaching in the schools as to the pernicious effects of alcohol, now endorsed by every physiological authority, is a practical method of fortifying the younger generation against that enemy of health, mental and physical.

Mere knowledge, however, of a fact does not necessarily involve performance of the corresponding duty. It is probably known to all now that fresh air is a most valuable factor in health, and yet how few people act as if they knew it. Education, therefore, requires to be supplemented by wise supervision of Sanitary Officers. Inspection of houses is necessary if the standard of hygiene is to be maintained, and, in many cases, such inspection shows how absolutely impossible it is for the poor tenant to maintain such standard. The housing of the poor is a question of national import-

ance—one too vast to be treated in a report of this kind, but it is one in which I am sure the Council of Kendal is deeply interested, and one in the solution of which Kendal, like all old towns, requires the earnest co-operation of all who have the good of the community at heart. In such a spirit of co-operation I am convinced the question will continue to be faced, so that, should the population continue to diminish, it will, at least, not be attributable to the preventible cause of insanitary dwellings.

The table on page 11 shows a comparison between Kendal and the rest of the County, as well as between Kendal and the immediately surrounding district of South Westmorland. It will be seen that there is still room for improvement in the health of the Borough, much as it has altered during the last 15 years.

ZYMOTIC MORTALITY.

The table on page 17 shows that during the past year six deaths were attributed to zymotic disease, all due to whooping cough, and all under five years of age.

THE PHTHISIS MORTALITY was 15, which is about the average of fifteen years. As I said in my last report, the phthisis death houses are practically the houses of the working classes, not those where light and fresh air are obtainable ad libitum. The prevention of phthisis is probably more a question of housing than of anything else, for we need power to resist disease virus which is omnipresent in the atmosphere. To make the atmosphere of a town pure is an impossibility, though it may be possible to eliminate all dairy cows infected with tubercle, and to prevent the consumption of tuberculous meat. Houses in narrow sunless yards must cease to be used as dwelling houses, if preventable disease is to be prevented.

ANALYSIS OF THE DEATH RATE.

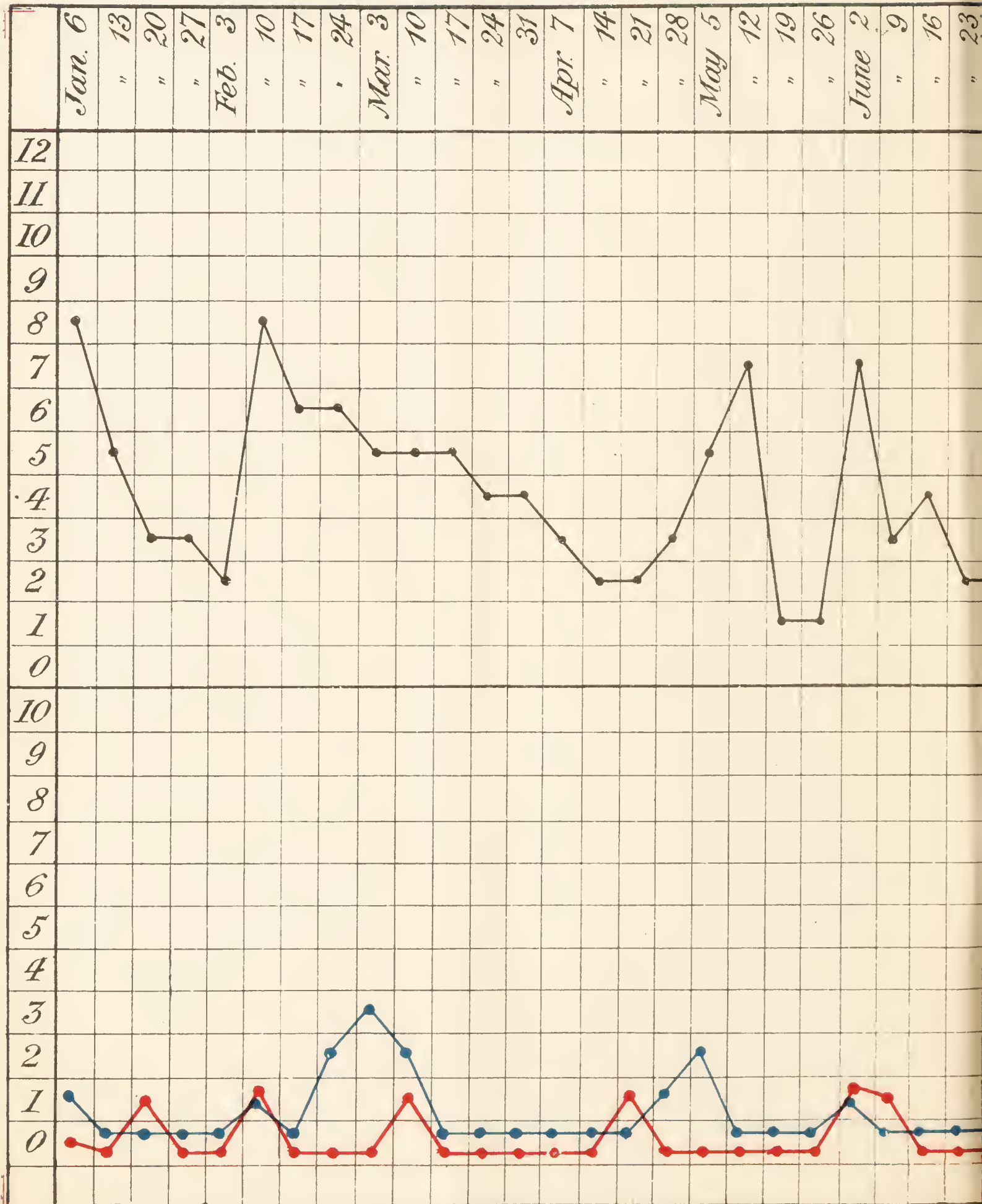
THE INFANT MORTALITY is fairly good, as such rates go in other towns, but when we know that it was 106 per 1,000 births in Kendal last year, but was only 52 per 1,000 in the surrounding district of South Westmorland, we cannot resist the conclusion that something more ought to be done to protect the lives of the babies of Kendal. It is of no use to allege that it is an insult to the mothers of Kendal to investigate the conditions under which the babies are reared. They die prematurely: two die under one year old where there ought to be only one. Whether this is due to the failure of mothers, from ignorance or otherwise, to feed or to clothe their babies properly, or is due to the failure of the Corporation to prevent the homes

Black line indicates TOTAL DE

Red line indicates ZYMOTIC De

Blue line indicates Notifications of

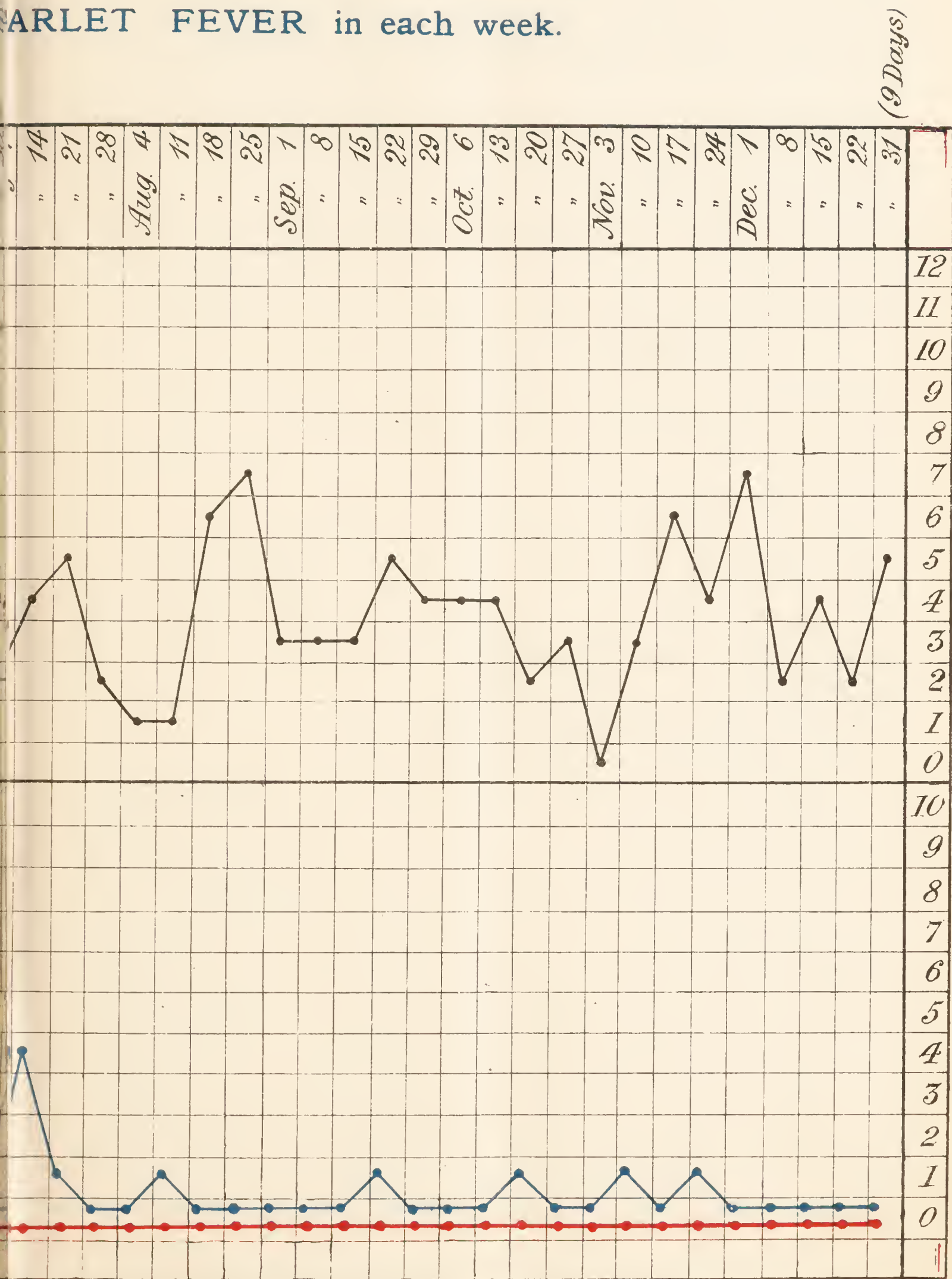
(6Days)



IS from all causes.

5.

EARLET FEVER in each week.



of the hapless ones being occupied when they do not come up to that standard of sanitary knowledge, which the intelligent self-respecting working man insists on, remains to be seen. Now that a HEALTH VISITOR is to be appointed, knowledge on this subject will be accumulated, and when it is obtained I doubt not that it will be acted upon and the causes of mortality removed, be they what they may.

CHILD MORTALITY—This rate of 3·5 per 1,000 estimated to be living at that age-period look satisfactory, but we are so far past the census year that I have little faith in the accuracy of my knowledge of the age and sex distribution at the present time—I might proceed to make deductions on absolutely false data.

ADULT MORTALITY—This shows a slight increase, but it is very slight if my estimate of the population at that age period be correct.

OLD AGE MORTALITY differs very slightly from the average of the eight years ending 1905; it was at the rate of 83 per 1,000 estimated to be living at that age period.

CAUSES OF AND AGES AT DEATH.

The following table, being table IV. of the Local Government Board, gives this information:—

CAUSES OF DEATH.	Deaths in or belonging to whole District at subjoined ages.							Recorded Death Rates per 1000 of total inhabitants.	Total Deaths in Public Institutions in the District.
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.		
Whooping-cough ...	6	2	4	...	...	.	...	·42	...
Epidemic Influenza ...	3	...	..	...	1	1	1	·21	...
Diarrhœa... ..	8	6	2	...	...	...	...	·56	...
Phthisis (Pulmonary Tuberculosis) ...	15	...	...	...	4	11	...	1·05	1
Other Tubercular Diseases	7	2	2	2	1	...	...	·4)	1
Cancer, Malignant Disease	13	...	...	...	...	5	8	·91	...
Bronchitis	10	2	1	...	...	1	6	·7	...
Pneumonia	4	1	...	...	...	2	1	·28	1
Alcoholism	3	...	...	...	...	3	...	·21	...
Cirrhosis of Liver }									
Premature Birth ...	10	10	...	...	...	...	...	·7	...
Heart Diseases ...	26	...	1	...	1	17	7	1·82	4
Accidents... ..	5	...	2	1	...	1	1	·35	2
Suicides	4	...	...	...	...	3	1	·28	...
Apoplexy	15	...	...	...	..	5	10	1·05	...
Old Age	20	...	...	...	...	...	20	1·40	...
All other Causes ...	50	12	3	2	...	24	9	3·5	3
All Causes	199	35	15	5	7	73	64	...	12

INFANTILE MORTALITY DURING THE YEAR.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSES OF DEATH.			Under 1 Week.	1-2 Weeks.	2-3 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	9-10 Months.	11-12 Months.	Total Deaths under 1 Year.
All Causes	{ Certified	...	11	2	1	14	5	1	2	3	1	2	1	3	1	33
	{ Uncertified	...	...	...	...	...	...	1	...	...	1	...	...	...	...	2
Common Infectious Diseases:																
Whooping Cough...			...	...	...	...	1	...	...	...	...	...	...	1	...	2
Diarrhoeal Diseases—																
Diarrhoea, all forms			...	...	...	...	...	...	...	1	...	...	...	1	...	2
Enteritis, Muco-enteritis,																
Gastro-enteritis...			...	...	...	...	1	...	...	1	...	...	...	...	...	2
Gastritis, Gastro-intestinal																
Catarrh ...			...	...	...	...	...	...	1	...	1	...	...	...	...	2
Wasting Diseases—																
Premature Birth ...			...	9	2	...	9	1	...	...	...	...	...	...	...	10
Congenital Defects			...	1	...	...	3	...	1	...	...	...	...	...	...	4
Atrophy, Debility,																
Marasmus			...	...	...	...	...	...	...	...	...	...	1	...	...	1
Tuberculous Diseases—																
Tuberculous Meningitis			...	...	...	...	...	...	...	1	...	1	...	...	...	2
Rickets			...	...	...	...	...	...	...	...	...	...	...	1	...	1
Convulsions			...	1	...	...	...	...	1	...	...	...	...	...	...	2
Bronchitis			...	...	...	...	1	...	...	...	...	1	...	...	...	2
Pneumonia			...	...	...	...	...	...	...	...	...	...	...	...	1	1
Suffocating, Overlaying			...	...	...	...	1	1	...	...	...	...	...	...	...	2
Other Causes...			...	...	1	1	...	...	...	...	1	...	...	...	...	2
All Causes			...	11	2	1	14	5	2	2	3	2	2	1	3	35

Population, estimated to middle of 1906, 14,149. Births in the year, legitimate, 291 ; illegitimate, 14 ; total, 305. Deaths in the year of legitimate infants, 35 ; illegitimate infants, 0 ; total, 35. Deaths from all causes at all ages, 199.

The deaths due to whooping cough have been much above the average, but there were no deaths due to measles, scarlet fever or diphtheria. I do not mention typhoid fever for it is, I am thankful to say, almost unknown in this county for some years past. It is satisfactory that about one-third of the recorded deaths were attributed to heart disease, cerebral apoplexy or old age. Cancer stands at '91 per 1000 of the population, eight out of 13 deaths attributed to it were those of persons over 65 years of age.

INFECTIOUS DISEASES.

The total number of cases notified to me was as shown in the table following :—

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR.

Notifiable Disease.	Cases Notified in Whole District.							No. of cases removed to Hospital.
	At all Ages.	At Ages—Years.						
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards	
Smallpox ... ..	...	...	...	...	..	...	...	...
Diphtheria	6	...	2	I	I	2	...	I
Membranous Croup ..	0	...	...	0	...	..	...	...
Erysipelas	19	...	...	...	...	..	...	...
Scarlet Fever	23	...	4	15	3	I	...	16
Enteric Fever	I	...	...	...	I	...	...	I
Puerperal Fever	I	...	...	...	...	I	...	...
Totals	50	...	...	...	...	...	...	18

NOTIFIED OR ASCERTAINED INFECTIOUS DISEASE.

Year.	Smallpox.	Scarlet Fever.	Diphtheria and Membranous Croup.	Enteric Fever.	Continued Fever.	Erysipelas.	Puerperal Fever.	Total.
1890	0	10	10	22	I	13	0	56
1891	0	41	5	39	I	23	2	111
1892	0	32	2	29	5	26	2	96
1893	2	186	3	51	4	36	2	284
1894	0	236	10	10	I	50	4	311
1895	0	71	5	11	I	28	2	118
1896	0	8	6	6	I	23	I	45
1897	0	4	14	19	I	24	I	63
1898	0	8	21	18	I	20	I	69
1899	0	18	20	13	0	23	I	75
1900	0	93	3	6	0	23	0	125
1901	0	88	5	7	0	19	2	120
1902	8	258	7	7	I	23	I	305
1903	10	107	16	9	0	19	I	162
1904	0	399	11	9	0	17	0	436
1905	31	111	2	4	I	20	0	169
1906	0	23	6	I	0	19	I	50

SCARLET FEVER.

A glance at the table on page 20 shows that the cases were decidedly sporadic, for whilst there were no cases removed to the Sanatorium in June, September, or December, there were three in March, and three in July, but only one or two in each of the remaining seven months of the year. Sixteen out of the twenty-three notified cases were removed to the Sanatorium for isolation.

SANATORIUM.—Persons resident in the Borough spent 1,218 days in the Sanatorium whilst suffering from infectious diseases during the past year, and persons residing outside the Borough spent 1,442 days in isolation there, so that 45·7 per cent. of the patients were Borough cases. There were 16 patients in residence on the night of 31st December, 1905; 41 were admitted during the year 1906, and four remained under treatment on the night of 31st December, 1906.

The following table shows the number of patients treated during the year, where they came from, and from what diseases they suffered:—

Month.	PATIENTS ADMITTED.								Days' Residence		Mean No. of patients in residence
	Scarlet Fever		Typhoid Fever		Diphtheria.		Total				
	From K'dal	From other dist'cts	From K'dal	From other dist'cts	From K'dal	From other dist'cts	From K'dal	From other dist'cts	K'dal pat'nts	Other pat'nts	
In Sanatorium prior to Jan. 1, 1906	8	8	...	...	...	..	8	8	279	272	...
January	2	2	...	...	...	...	2	2	206	176	12·32
February	1	1	..	...	...	...	1	1	45	73	4·21
March	3	2	...	...	...	...	3	2	104	96	6·45
April	1	...	1	...	...	..	2	...	93	52	4·83
May	2	...	...	...	...	...	2	...	103	...	3·32
June ... ..	...	..	...	...	...	...	...	...	55	...	1·83
July	3	3	...	...	...	...	3	3	61	44	3·38
August	1	...	...	...	..	...	1	...	91	93	5·93
September ... ..	...	10	...	...	1	1	1	11	40	175	7·16
October	1	1	...	...	..	...	1	1	17	299	10·19
November	2	1	..	...	...	...	2	1	65	131	6·53
December ... ..	...	2	..	...	...	...	...	2	59	31	2·90
Totals	16	22	1	...	1	1	18	23	1218	1442	7·28

Year	PATIENTS ADMITTED.												Mean No. of patients in resi- dence.
	Smallpox		Diphtheria and Membranous Croup		Erysipelas		Scarlet Fever		Enteric Fever		Measles		
	From K'dal	From other dist'cts	From K'dal	From other dist'cts	From K'dal	From other dist'cts	From K'dal	From other dist'cts	From K'dal	From other dist'cts	From K'dal	From other dist'cts	
1882	9	...	...	...	...	...	...
1883	3	1	8	...	...	...	...
1884	1	...	3	...	...	..	...	...	26	...	...	...	...
1885	1	...	1	...	3	...	5	...	...	...	...
1886	4	...	4	...	...	1	...
1887	11	3	1	...	...	...	...
1888	5	...	1	...	...	...	23	3	8	...	...	...	..
1889	1	1	...	...	7	...	15	...	...	...	...
1890	8	...	4	1	...	...	..
1891	1	...	...	...	29	9	16	3	...	...	...
1892	2	...	...	26	5	5	3	...	...	...
1893	130	6	2	...	...	...	...
1894	140	16	...	...	...	...	14'1
1895	2	...	...	...	62	20	1	1	...	...	12'1
1896	3	...	...	...	4	16	3	5	...	...	5'4
1897	5	2	...	...	5	15	18	5	...	...	5'1
1898	9	...	...	1	11	6	9	3	...	...	4'4
1899	6	9	...	...	16	19	11	4	...	..	7'5
1900	89	21	5	1	...	...	12'7
1901	1	9	...	...	77	31	1	2	...	...	15'4
1902	2	2	...	...	237	56	3	1	...	...	41'4
1903	5	...	...	...	100	23	...	3	...	...	19'9
1904	2	1	...	...	314	23	...	...	...	...	38'1
1905	31	...	...	1	..	...	94	72	3	1	...	...	22'7
1906	1	1	...	...	16	22	1	...	...	...	7'28

This table shows the number of patients admitted to the Sanatorium in each year since its erection, but it must be noted that the 31 cases of smallpox in 1905 were treated in the Joint Smallpox Hospital at New Hutton, and are noted here for convenience of record only.

HOUSING OF THE PEOPLE.

As will be seen by the report of Inspector Jackson, thirteen houses have been reported during the year to be unfit for habitation, and whilst some have been closed others have been repaired by the owners at very considerable expense. Bearing in mind the bad arrangement of many of the dwellings, apart from the construction of each particular house, it is very questionable if the money expended in repairs is not badly spent money in the long run, and if demolition and reconstruction is not the best course to adopt. In the case of trust properties, and particularly those in which widows have life interest, or young children have to be immediately

provided for out of revenue, it is easy to understand that repair is deemed desirable. Were Kendal a rapidly increasing and prosperous manufacturing town, whose artisans were in receipt of large wages, schemes of reconstruction of several areas in the middle of the town might be practicable, but under present circumstances, the reconstruction will, I fear, have to be left to the powerful force of an educated public opinion. As the people become alive to the fact that sunlight, a free exposure to every wind that blows, a dry atmosphere and a dry subsoil are essential to health, and health essential to happiness and commercial prosperity, then the areas to which I refer will become untenanted and the opportunity may occur to provide open spaces, new streets, and new houses, for old and untenanted property will speedily go to pieces. The abolition of such property not only improves the health of the district, but it also causes "undesirables" to leave the place and to seek shelter in other districts, where the class of property in which they invariably herd themselves together, is considered good enough to be permitted to be occupied by human beings.

SEWAGE DISPOSAL.

On May 17th, 1906, a public enquiry was held on an application to borrow £8,000 for works of sewage disposal. The new works are in progress of construction.

WATER SUPPLY.

Complaints have from time to time been made of impurities, mainly of a vegetable character, in the water supplied to the town. The analysis made by the late Sir Edward Frankland, prior to the construction of the works authorised by the Water Act of 1894, showed that the water proposed to be impounded contained vegetable impurities, and he stated that the water would be improved by filtration, if I rightly remember the phrase adopted. I cannot say that I possess evidence of disease actually traceable to the water supplied, but inhabitants, from time to time, bring to me animal and vegetable organisms which they tell me have come through their service pipes, and which nobody would allege was food beneficial to the health of man, as a public general water supply is expected to be.

SUBSOIL WATER AND FLOODS.

It is well known that the drier the soil is on which a house stands, the more healthy it is. A large part of the town stands upon ground which, in wet weather, has the subsoil water very near to the surface, and at times actually floods for a while. If we look at the piers of Stramongate Bridge

we see at once that their foundations are many feet below the present bed of the river, and, therefore, that the removal of stone from the river bed, and the construction of a bye-wash at each dam in the river, say six or seven feet below the level of the top of the dam, would enormously increase the sectional area of the river below the level of the land on either side. This would, of necessity, prevent flooding in the town, and make the sites of hundreds of the houses far drier and healthier than at present. The flood water would, by means of the bye-wash, cause a much greater scour, and thus help to remove deposit in the river bed, whether of stones or of softer material, both of which detract from the appearance of the river, apart from questions of health and increase of water power.

BYE-LAWS.

The Public Health Acts Amendment Act, 1890, gave powers to make bye-laws for several purposes not provided for by the Act of 1875, but which would, without doubt, facilitate the proceedings of the Council. It would be well that this matter be considered, and at the same time, I would point out that a Bill is now before Parliament, entitled the Public Health Bill, which is so supported by the Government, that, in a few weeks it will probably receive the Royal Assent. I have read the Bill, and there are many valuable powers proposed to be conferred by it.

FLAGGING OF YARDS.

In the lower class of property, it is of particularly great importance that a pure atmosphere, untainted by the odours of decomposing animal matter, should pervade the houses. In order to attain that end, the surface of the ground within 6ft. to 9ft. of every house in a yard, should be covered with tar-macadam, or other water-tight paving material, so that anything offensive, thrown out of the house or spilled upon the surface of the ground, may be washed away either by hose pipe or rain.

SANATORIUM.

Whilst I am not at all in favour of an increased number of cases of infectious disease being isolated on the site of the present buildings, or even adjacent to them, holding rather that convalescing cases, particularly of scarlet fever, should be isolated out in the country, where they have plenty of room to run about, without being able to come in contact with their friends, and where they could not come in contact with acute cases, still I am confident that the best interests of the inhabitants would be served by

the provision of two or three Observation Wards. The cost need not be great, but it would be best undertaken in connection with a scheme of re-arrangement of the present accommodation. Bearing in mind the very large extent to which the Sanatorium is used by the inhabitants of the district outside the Borough, the matter should be approached with an open mind for the cost and advantages would not, by any means, pertain to the Borough alone.

I append Inspector Jackson's report of the work done in his department, and, in doing so, I must congratulate the Council on its good fortune in having the services of such an officer.

R. MUSGRAVE CRAVEN, D.P.H., Camb.,
Medical Officer of Health.

Kendal,

June, 1907.

ANNUAL REPORT OF THE INSPECTOR OF NUISANCES, 1906.

I beg to submit the Annual Report of the work done by the Sanitary Department during the year ending December 31st, 1906.

THE ADMINISTRATION OF THE PUBLIC HEALTH ACTS.

385 formal notices to abate nuisances or comply with other requirements of the Public Health Acts, and the Bye-laws in force in the Borough were served, of which the following is a summary :—

Defective eaves or down spouts	...	...	...	...	12
Defective sinks or sink wastes	...	...	...	...	23
Defective and insufficient ashbins	...	...	...	...	76
Defective yards	...	...	...	...	3
Accumulation of offensive refuse	...	...	...	...	11
Animals kept so as to be a nuisance	...	...	...	...	2
Defective ashpits	...	...	...	...	11
Smoke nuisances	...	...	...	...	4
Defective and choked drains	...	...	...	...	77
Water closets or privies dirty and requiring limewashing	...	...	...	...	16
Defective pail closets	...	...	...	...	11
Water closets with insufficient supply of water	...	...	...	...	9
Defective privies	...	...	...	...	24
Defective water closets	...	...	...	...	18
Insufficient privy accommodation	...	...	...	...	1
Defective gullies	...	...	...	...	3
Factories and workshops with insufficient sanitary accommodation	...	...	...	...	4
Dirty yards	...	...	...	...	10
Water closets improperly fouled	...	...	...	...	17
Defective urinals	...	...	...	...	3
Defective tipper closets	...	...	...	...	1
Houses with insufficient supply of water	...	...	...	...	9
„ dirty and requiring limewashing	...	...	...	...	6
„ overcrowded	...	...	...	...	11
„ with defective walls, floors or roof	...	...	...	...	4

Houses with insufficient water closet accommodation	...	..	1
„ with insufficient ventilation	...	...	6
„ unfit for human habitation	..	...	12
Total			<hr/> 385 <hr/>

56 statutory notices were served in cases where the preliminary notice had not been complied with.

Proceedings before the Magistrates were taken in two cases to cause nuisances to be abated. One of these nuisances being caused by a defective privy, and the other by a defective house floor. In each case an order was made to abate the nuisance.

HOUSING OF THE WORKING CLASSES.

13 houses were condemned as being unfit for human habitation. In one case proceedings were taken before the Magistrates, and a closing order obtained. Of the remainder, six have been re-constructed and repaired, two are used for other purposes than dwellings, two are unoccupied, and two are in the course of alteration.

INFECTIOUS DISEASE AND DISINFECTION.

In all cases notified this year, as well as in three cases notified the previous year, the houses and bedding were thoroughly disinfected.

10 houses in which cases of Phthisis had occurred, were disinfected after the removal to Meathop or the death of the patient.

A register is kept of all the known cases of Phthisis, and periodical visits are made to most of these, and advice given as to ventilation and isolation. Disinfectants are provided free of charge to all houses in which cases of Phthisis occur.

1728 articles were disinfected in the steam disinfector.

The Sanatorium has been maintained in an efficient manner, and all the buildings are in good repair.

The Smallpox Hospital has been periodically inspected, and has been kept well aired and dry.

FACORIES AND WORKSHOPS ACT.

No. of workshops on register 1905	...	...	...	...	93
Registered during 1906	...	...	...	...	69
					162
Total					..
No. of outworkers on register	...	...	...	...	6

294 inspections were made of factories and workshops, and 31 notices to comply with the requirements of the Act, or to abate the nuisance were served.

FOOD AND DRUGS ACT.

10 samples of milk, eight samples of butter, two samples of coffee, one sample of pepper, and one sample of ginger were obtained, all of which proved to be genuine on analysis.

One sample of bottled green peas was found to be slightly adulterated with copper, but not sufficiently to warrant prosecution.

CANAL BOATS ACTS.

70 inspections were made of 19 boats.

Three notices were served on masters of boats requiring them to cleanse cabins.

There are no boats registered in the Borough.

DAIRIES, COWSHEDS, AND MILKSHOPS.

No. of Milksellers on register 1905	...	...	...	...	48
No. registered during 1906...	...	...	...	...	4
					52
Total					...
No. of Cowsheds in the Borough 1905	...	...	...	...	14
„ „ discontinued 1906...	...	...	...	...	2
					12
Total					...

36 inspections were made of 12 Cowsheds.

These for the most part were found to be in a very unsatisfactory condition, by reason of their insufficient lighting and ventilation and defective paving and drainage.

I trust that next year I may be able to report that all these have been put into a thoroughly sanitary condition.

HOUSE REFUSE REMOVAL.

I regret to report that the House Refuse Removal Work has again been carried out in a very unsatisfactory manner by the Contractor, and trust, that, when the contract expires in March, 1907, the Council will once more carry out the work with their own staff of men.

This would cost more than the present system, but there would be the satisfaction of knowing that the work was done efficiently.

Proceedings were taken against the Contractor for a breach of the By-law with respect to the carting through the streets of faecal matter, and he was fined 11/- and costs by the Magistrates.

The Tip at Parkside Road, is rapidly filling up, and will be completely so in a little over a year, when a new tip will have to be found, or a Destructor erected.

SLAUGHTER HOUSES.

147 visits were made to the two Slaughter Houses.

At the Public Slaughter House, 884 beasts, 5,976 sheep, and 983 pigs were slaughtered.

Two carcasses and the viscera of six beasts were destroyed as being unfit for food.

New concrete floors have been laid down, and new drains constructed at the Public Slaughter House.

The Private Slaughter House on the New Road, has been maintained in a cleanly manner.

CONVERSION OF PRIVIES INTO WATER CLOSETS.

The work of converting privies into water closets has progressed steadily, if slowly.

33 privies and 17 pail closets have been converted into W.C's. during the year.

There are now remaining 118 privy ashpits, but several of these are only used as ashpits and not as privies.

The following is a summary of inspections made :—

No. of inspections to dwellings, including privies, ashpits, W.C's., &c.	4573
„ „ „ factories and workshops	162
„ „ „ slaughter houses	147
„ „ „ bakehouses	78
„ „ „ offensive trades... ..	42
„ „ „ common lodging houses	35
„ „ „ canal boats	70
„ „ „ dairies and cowsheds	36
„ „ „ re-construction of drains	275
Total ...	<u>5418</u>

(Signed)

GEO. JACKSON.

